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May 20, 2004

Mr. Thomas Grim, L-293 U.S. Department of Energy, National Nuclear Security Administration Livermore Site Office, SWEIS Document Manager 7000 East Avenue Livermore, CA 94550-9234

Fax: (925) 422-1776 Email: tom.grim@oak.doe.gov

RE: Comments on the Department of Energy's Site-Wide Environmental Impact Statement (SWEIS) for Continued Operations at Lawrence Livermore National Laboratory (LLNL).

Dear Mr. Grim:

Through this letter I am expressing my deep concern with the health and environmental risks posed by the expanded nuclear weapons mission for the Lawrence Livermone National Laboratory (LLNL) into the indefinite future. I appreciate your focused attention to this matter. Below, I have outlined a number of specific concerns that, taken cumulatively, lead me to the conclusion that the Site Wide Environmental Impact Statement (SWEIS) for the continuing operation of LLNL is so deficient in information and analysis that it must be fixed and re-circulated in draft form. This would allow the community, the regulators, and the legislators to have the opportunity to evaluate the new information that is requested in these comments. My specific concerns are:

1. The same day of the public hearings for the SWEIS, April 27, 2004, the Congressional

1/31.04

Subcommittee on National Security, Emerging Threats, and International Relations for the Committee on Government Reform held a hearing on the security of nuclear materials. The hearing highlighted potentially insurmountable problems with plutonium and highly enriched uranium at certain Department of Energy (DOE) sites, with a focus on the vulnerability of nuclear materials storage at LLNL. On May 7, 2004, Energy Secretary Spencer Abraham delivered a speech on the deficiencies in the security of nuclear materials at LLNL and other DOE sites. The Energy Secretary made a commitment to consider removing the special nuclear materials at LLNL by 2005. This recent acknowledgement by the DOE that security at LLNL is questionable makes it imperative that the SWEIS evaluate an alternative that would remove all special nuclear materials from LLNL. These acknowledgements make this not only a reasonable option, but one that should be evaluated because it is a foreseeable outcome within the next decade at LLNL.

2/08.02

Instead of reducing the amount of special nuclear materials on-site at LLNL, this plan proposes to more than double the limit for plutonium at Livermore Lab from 1,540 pounds to 3,300 pounds. Additionally, under the Proposed Action, the administrative 2/08.02 cont. limit for highly enriched uranium in Building 239 would increase from 55 pounds to 110 pounds. Seven million people live in surrounding areas, and residences are built right up to the fence. Plutonium is difficult to store safely because, in certain forms, it can spontaneously ignite and burn. Moreover, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed for LLNL is sufficient to make more than 300 nuclear bombs. Because of the health risks, the proliferation dangers, storage hazards, and very serious security concerns, we believe it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We are calling upon the DOE to de-inventory the plutonium, highly enriched uranium and tritium stocks at LLNL rather than to increase them.

3/34.01 4/33.01, 25.01 3. The SWEIS proposes to increase the at-risk limits for tritium ten fold, from just over 3 grams to 30 grams. The SWEIS proposes to increase the at-risk limit for plutonium from 44 pounds to 132 pounds. We believe it is unsafe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. LLNL has a history of criticality violations with plutonium and releases of both tritium and plutonium, making it evident that these amounts should be decreased, rather than increased.

5/27.01

4. This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project was called Plutonium - Atomic Vapor Laser Isotope Separation (AVLIS). Now it is called the "Integrated Technology Project"(ITP) and the "Advanced Materials Program"(AMP). This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the vapor to separate out plutonium isotopes. The ITP / AMP is a health risk and a nuclear proliferation nightmare. We believe the ITP and AMP work should be cancelled as the Plutonium AVLIS was cancelled in 1990 - this time permanently.

6/37.01

5. This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb factory, called the Modern Pit Facility (MPF). Public and Congressional opposition to the MPF has caused its delay this year. The Livermore Lab plutonium pit program goes full-speed ahead in the wrong direction. It will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 cores per year. This production capability would approximate the combined nuclear arsenals of France and China - each year. We call upon the DOE to halt all work on plutonium pit production technologies at Livermore Lab. We believe it is premature for the DOE to spend taxpayer dollars on this technology and the prudent and reasonable outcome is to delay or cancel this project.

7/26.01 8/26.03 6. This plan will add plutonium, highly-enriched uranium and large quantities of lithium hydride to experiments in the National Ignition Facility mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development, including for the design of new types of nuclear weapons. It will also make the NIF more hazardous to workers and the environment. This is not

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| 7/26.01 8/26.03 cont. | only dangerous to people's health and safety, and a proliferation risk, but it is sure to result in an inordinate cost to the taxpayer. No cost estimate associated with this proposal has been released to date. We ask the DOE to cancel these dangerous, polluting, proliferation-provocative and unnecessary new experiments proposed for the NIF. |
|-----------------------------|--|
| 9/26.04 | 7. The SWEIS reveals plans to manufacture tritium targets at LLNL. The tritium-filled targets are the radioactive fuel pellets that the NIF's 192 laser beams will "shoot" in an attempt to create a thermonuclear explosion. Producing the targets will increase the amount of tritium that is used in any one room at Livermore Lab from the current limit of just over 3 grams to 30 grams - nearly 10-fold more. In the mid-1990's, LLNL stated that target fabrication was to occur off-site because of LLNL's proximity to large populations. Livermore Lab has a history of tritium accidents, spills and releases. The NIF will increase the amount of airborne radioactivity emanating from LLNL. We call on DOE to cancel plans to manufacture tritium targets for NIF at Livermore Lab. Further, we urge cancellation of the NIF megalaser. Cancellation of NIF is a reasonable alternative that should be fully analyzed in the SWEIS. |
| 10/39.01 | 8. This plan also calls for Livermore Lab to develop diagnostics to "enhance" the nation's readiness to conduct full-scale underground nuclear tests. This is a dangerous step back to the days of unrestrained nuclear testing. All work at LLNL to reduce the time it takes to conduct a full-scale underground nuclear test should be terminated immediately. |
| 11/35.01 | 19. This plan mixes bugs and bombs at Livermore. It calls for collocating an advanced biowarfare agent facility (BSL-3) with nuclear weapons activities in a classified area at Livermore Lab. The plan proposes genetic modification and aerosolization (spraying) with live anthrax, plague and other deadly pathogens. This could weaken the international biological weapons treaty and it poses a risk to workers, the public and the environment here in the Bay Area. The draft SWEIS does not adequately describe these programs, or the unique security, health and environmental hazards they present. Construction should be halted on the portable BSL-3 facility. All plans to conduct advanced bio-warfare agent (BSL-3) research on site at LLNL should be terminated. |
| 12/14.01 | 10. There are 108 buildings identified at LLNL as having potential seismic deficiencies relative to current codes. The SWEIS should include a complete list of these buildings and an accounting of the ones that house or may house hazardous, radiological and biological research materials. LLNL is located within 1 kilometer of two significant earthquake faults, including the Las Positas Fault Zone less than 200 feet from the LLNL boundary. How can we mitigate harm done from an earthquake that damages these buildings before they are brought up to code? We urge the Livermore Lab to stop any work with hazardous, radioactive or biological substances that may be occurring in any building that does not comply with federal standards. |
| 13/22.01 | 11. A contractor will be paid to package and ship more than 1,000 drums of transuranic and mixed transuranic waste to the WIPP dump in New Mexico, yet the SWEIS says this is exempt from environmental review. This work in its entirety must be included in the review. |
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| | |

14/20.05

12. The DOE does not acknowledge in the SWEIS that the double-walled shipping containers described in the document may be replaced by less health - protective singlelined containers. We believe that no waste should be shipped in single-walled containers and the SWEIS should provide a guarantee to that effect.

15/01.01

13. The Purpose and Need statement in the SWEIS relies heavily upon the US Nuclear Posture Review, which calls for an aggressive modernization and manufacturing base within the US nuclear weapons complex. This stands in stark contrast to the binding legal mandate to shift "from developing and producing new weapons designs to dismantling obsolete weapons and maintaining a smaller weapons arsenal". We believe a revised Purpose and Need statement should accurately reflect the Livermore Lab's legal responsibility with regard to US law, including US obligations under the nuclear Non-Proliferation Treaty (NPT).

Further, the Purpose and Need statement in the SWEIS almost completely omits LLNL's important role in civilian science research. This omission fatally flaws the alternatives analysis in the SWEIS by neglecting to consider the expanded role that civilian science 16/07.01 programs at the LLNL could play in the next decade.

> The alternatives analysis should be revised to consider LLNL's role in light of the commitments in the NPT and the Livermore Lab's civilian science mission as well as the compelling case for removing special nuclear materials (i.e., plutonium and highly enriched uranium) from the LLNL site.

Sincerely, Jesa Wolff 169 18th Avenue San Francisco, CA 94121

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To: Mr. Tom Grim DOE, NNSA, L-293 7000 East Avenue Livermore, CA 94550

Dear DOE:

Here is my comment on the draft Site-Wide Environmental Impact Statement on Livermore Lab operations over the next ten years. The SWEIS calls for major increases in nuclear weapons design and manufacture. New plutonium activities include: raising the inventory from 1,540 pounds to 3,300 pounds; tripling the amount "at risk" at one time; creating prototype bomb cores for a new "Modern Pit Facility;" fissioning plutonium in the NIF megalaser; and vaporizing plutonium oxide on-site to separate isotopes. There are also plans to increase the "at risk" limit for radioactive tritium ten-fold.

I oppose these actions that will increase nuclear proliferation 1/04.01 and damage our environment. I call on you to analyze conversion 2/07.01 of the Lab to peaceful purposes as an alternative.

Sincerely,
Sha furments

Address:
710 38th Are.
5anta Care, Car
98062

Candell, Marlene Page 1 of 1

2900 Buena Vista Way Berkeley CA 94708 April 13, 2004

Mr. Tom Grim DOE, NNSA, L-293 7000 east Avenue Livermore CA 94550

Dear Mr. Trim:

I have been following with concern the nuclear activities at Livermore Lab for over 20 years, but I fear the planned operations envisioned in the DOE's new draft site-wide Environmental Impact Statement are the most ill-conceived and frightening to date.

2/33.01 1) Doubling the amount of plutonium to 3300 pounds—when one inhaled particle can cause line capper and other discourse. cause lung cancer and other diseases -- and doing this on an earthquake-prone area of 6 million plus population--what are they thinking?

2) Planning to test technologies for producing plutonium pits with the eventual ability 3/37.01 to produce 900 bomb cores per year--the approximate combined nuclear arsenals of China and France--what are they thinking?

3) "Enhancing" readiness to conduct underground nuclear tests and thereby 4/39.01 encouraging other countries to regress to the era of unrestrained nuclear testing--what are they thinking?

5/34.01 4) Allowing manufacture of tritium targets for the NIF with the strong possibility of increasing airborne radioactivity--what are they thinking?

5) Finally, proposing genetic modification and aerosolization with live anthrax, plague, 6/35.01 etc., thus weakening the international biological weapons treaty and threatening the public--what are they thinking?

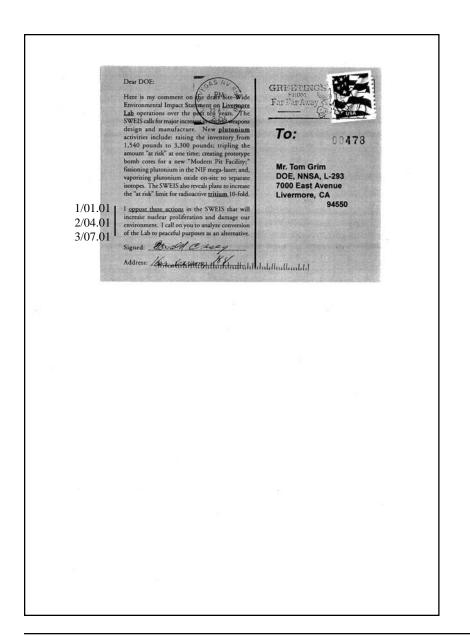
> In summary, the costs in human, environmental, and proliferation terms far outweigh any perceived benefits from these plans.

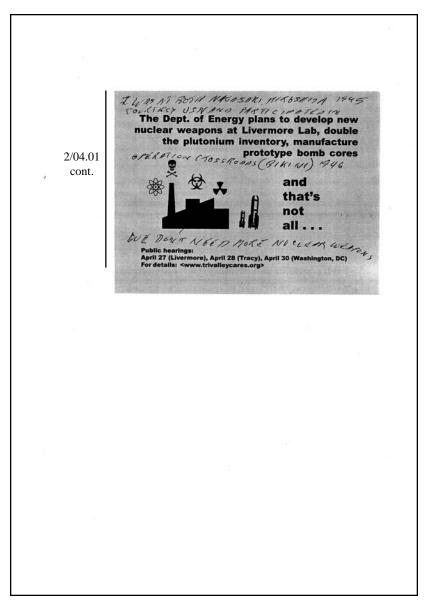
Sincerely.

This is a follow up to my testimony april 27

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Cato, Julie Page 1 of 1

Dear Mr. Smi! I object to the DOK's record relocated Swell 53 for Liverme Labor planach operations for the next 10 years. I am apart that Swell Sallagh double be around a planame allower of for Liverme Less from 1540 lb \$3300 lb. One microscope parties of planame Can cause are concer of inhelad. On far powers and make me than 700 muclear booms. To these and other domain aspects I ask yout appre his Misguidel will load yout Sweets. Lively One.

Center for Defense Information, Victoria Samson, Research Analyst Page 1 of 1

Comment on Site-Wide Environmental Impact Statement (SWEIS) for the Lawrence Livermore National Laboratory

By Victoria Samson, Research Analyst, Center for Defense Information

Given April 30, 2004, at DOE, Washington, D.C.

The recently-released Site-Wide Environmental Impact Statement (SWEIS) for Lawrence 1/02.01 Livermore National Laboratory (LLNL) tips the Department of Energy (DOE)'s hand toward its plan to not only maintain the U.S. nuclear arsenal but to expand it.

> The plan divulges that LLNL is likely to develop diagnostics to enhance the United States' nuclear test readiness level. This comes on the heels of repeated efforts by this administration to do the same. Last year, \$24.89 million was requested so that DOE could decrease the amount of the time needed to prepare and hold a nuclear test. Congress, after much debate, approved the amount but instructed DOE to keep the U.S. nuclear test readiness at its current level (24-36 months).

2/39.01

But in this year's budget request, the administration decided to ignore earlier Congressional restrictions. Again, funding was requested for enhanced test readiness: this time, \$30 million is to create an 18-month readiness level. This 21.4 percent increase over last year comes after repeated testimony by DOE officials to the safety and reliability of the U.S. nuclear arsenal. The only possible need for new nuclear testing would be to try out a new weapon design.

In fact, funding has been requested for just that. The Robust Nuclear Earth Penetrator (RNEP) is portrayed by supporters as a weapon that could be used against hardened and deeply buried targets. \$15 million was requested in FY 2004; Congress approved \$7.5 million for the project, but specified that none of the money could be used for engineering development. This year, \$27.6 million was requested for the RNEP - an increase of 270 percent. Even more ambitious is the DOE's five-year plan, in which it estimates that \$484.7 million would be spent on the RNEP. DOE officials claim that this estimate is simply a placeholder for R&D work; but half a billion dollars pushes the RNEP well past mere research project status.

3/02.01

The B83, which has been worked on at LLNL, is often bruited as a possible candidate for the RNEP. Lab officials frequently promote their institution as a home for the next generation of technology, pointing to their work on stockpile stewardship as the beneficiary of that relationship. However, DOE is doing more than that. It is moving toward an enhanced nuclear test readiness posture and aggressively spending on a new weapon design whose engineers are likely to push for testing. This spending will negatively affect international non-proliferation regimes. The RNEP and enhanced nuclear test readiness level show that the United States regards its nuclear arsenal as 4/01.01 insufficient for its national security needs. If we continue to improve our nuclear arsenal. how can we realistically expect to stop other countries from following our lead?

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